

1. **Floor and Ceiling Runners** — (not shown) — Channel shaped runners, 3-5/8 in. wide (min), 1-1/4 in. legs, formed from min No. 25 MSG galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

2. **Steel Studs** — Channel shaped, 3-5/8 in. wide (min), 1-1/4 in. legs, 3/8 in. folded back returns, formed from min No. 25 MSG galv steel spaced 24 in. OC max.

3. **Batts and Blankets\*** — (Optional) — Mineral wool or glass fiber batts partially or completely filling stud cavity. See Batts and Blankets (E2J2) category for names of Classified companies.

3A. **Fiber, Sprayed\*** — As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft<sup>3</sup>. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft<sup>3</sup>.

U S GREENFIBER LLC — Cocoon2 Stabilized or Cocoon-FRM (Fire Rated Material)

3B. **Fiber, Sprayed\*** — As an alternate to Batts and Blankets (Item 3) and Item 3A - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.

NU-WOOL CO INC — Cellulose Insulation

4. **Gypsum Board\*** — 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When attached to item 6 (resilient channels) or 6A (furring channels), wallboard is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. OC.

AMERICAN GYPSUM CO — Types AG-C, AGX-1

BEIJING NEW BUILDING MATERIALS PUBLIC

LTD CO — Type DBX-1

BPB AMERICA INC — Types 1, EGRG, ProfoC Type X, ProfoC Type C.

BPB CANADA INC — ProfoC Type C, ProfoC Type X or ProfoC Type Abuse-Resistant.

CANADIAN GYPSUM COMPANY — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX.

G-P GYPSUM CORP, SUB OF

GEORGIA-PACIFIC CORP — Types S, 9, C, DAF, DD, DA, DGG, DS, GPF56.

LAFARGE NORTH AMERICA INC — Types LGFC2, LGFC2A, LGFC6, LGFC6A, LGFC-C, LGFC-C/A.

NATIONAL GYPSUM CO — Types FSK, FSK-C, FSK-G, FSW-C, FSW-G, FSW, FSW-3, FSW-5.

PABCO BUILDING PRODUCTS LLC, DBA

PABCO GYPSUM — Type PG-C or PG-9.

PANEL REY SA — Type FRX.

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1

TEMPLE-INLAND FOREST PRODUCTS CORP — Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, TS-C.

UNITED STATES GYPSUM CO — Type AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX.

USG MEXICO SA DE CV — Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX.

4A. **Gypsum Board\*** — (As alternate to Item 4) - Nom 5/8 in. thick gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed. Panels attached to steel studs and floor runner with 1 in. long Type S steel screws spaced 8 in. OC when applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. When used in widths other than 48 in., gypsum panels to be installed horizontally.

CANADIAN GYPSUM COMPANY — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX.

UNITED STATES GYPSUM CO — Type AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX.

USG MEXICO SA DE CV — Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX.

4B. **Gypsum Board\*** — (As an alternate to Items 4 or 4A) — Nom 3/4 in. thick, 4 ft wide, installed as described in Item 4A with screw length increased to 1-1/4 in.

CANADIAN GYPSUM COMPANY — Types AR, IP-AR.

UNITED STATES GYPSUM CO — Types AR, IP-AR.

USG MEXICO SA DE CV — Types AR, IP-AR.

5. **Joint Tape and Compound** — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nominal 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges.

6. **Resilient Channel** — (Optional-Not Shown) — 25 MSG galv steel resilient channels spaced vertically max 24 in. OC, flange portion attached to each intersecting stud with 1/2 in. long type S-12 panhead steel screws.

6A. **Steel Framing Members (Not Shown)\*** — As an alternate to Item 3, furring channels and resilient sound isolation clip as described below:

a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel.

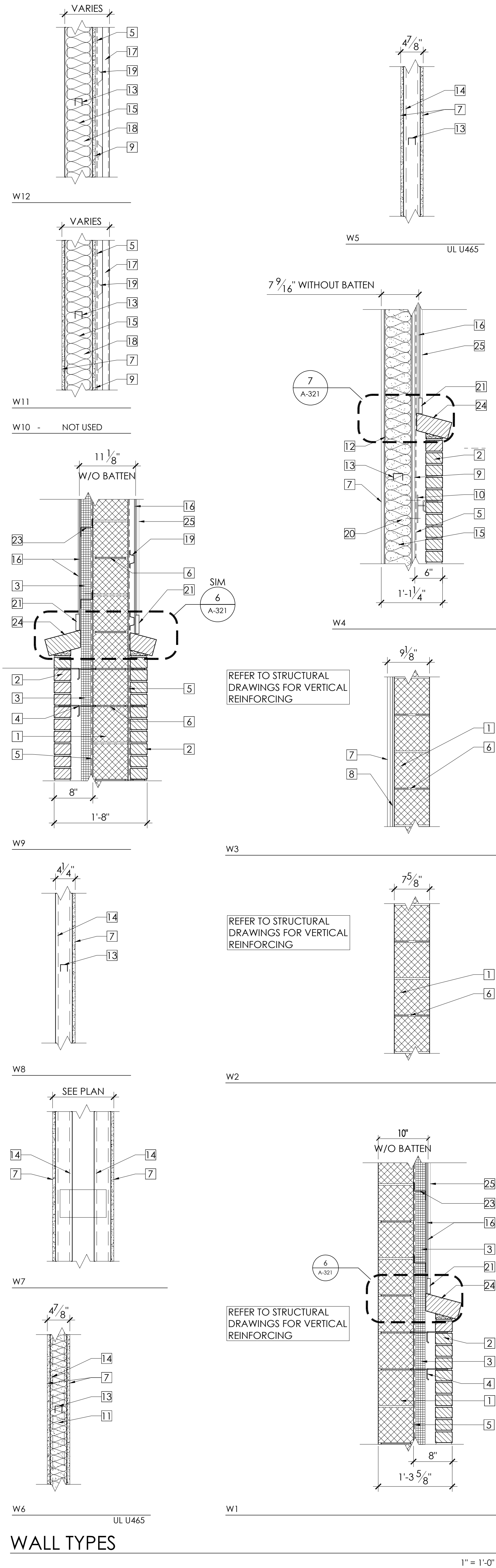
b. **Steel Framing Members\*** — Used to attach furring channels (Item a) to studs (Item 1). Clips spaced 48 in. OC, and secured to studs with 1-5/8 in. wafer or hex head Type S steel screw through the center grommet. Furring channels are friction fitted into clips.

PAC INTERNATIONAL INC — Type RSIC-1.

7. **Wall and Partition Facings and Accessories\*** — (Optional, Not shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-510 panel is installed between the steel framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

\* Bearing the UL Classification Mark

## UL FIRE RESISTANT CONSTRUCTION



## WALL TYPES

### NOTES THIS DRAWING:

- 1 NOM 8" CMU
- 2 4" NOM BRICK VENEER
- 3 2" THICK RIGID CAVITY WALL INSULATION
- 4 EYE & PINTLE HORIZONTAL JOINT REINFORCING
- 5 SPRAY-APPLIED AIR/VAPOR BARRIER
- 6 HORIZONTAL JOINT REINFORCING @ 16" O.C.
- 7 5/8" FR HI-ABUSE GYPSUM WALL BOARD
- 8 7/8" METAL FURRING AT 16" OC
- 9 5/8" GLASS MAT EXTERIOR SHEATHING
- 10 TWO PIECE EYE & PINTLE BRICK VENEER TIE
- 11 3 1/2" THICK SOUND ATTENUATION BATT INSULATION
- 12 6" DEEP 33 MIL 16" O.C.
- 13 1 1/2" DEEP HORIZ BRIDGING CHANNEL @ MID-SPAN OF WALL - 8'-0" MAX SPACING
- 14 3 5/8" DEEP, 30 MIL STUD @ 16" O.C.
- 15 6" THICK BATT INSULATION R-19
- 16 5/16" THICK CEMENTITIOUS VERT PANEL SIDING - REFER TO DETAIL 5/A-201
- 17 1 1/2" DEEP METAL WALL PANELS (VERT BOX RIB)
- 18 METAL STUD OR ROOF TRUSS - REFER TO STRUCTURAL DRAWINGS
- 19 7/8" DEEP 30 MIL FURRING CHANNEL AT 24" OC
- 20 METAL STUD - REFER TO STRUCTURAL FOR SIZE, THICKNESS & SPACING
- 21 1 X 4 CEMENTITIOUS TRIM BOARD
- 22 -NOT USED--
- 23 2" HORIZ Z-FURRING @ 16" OC
- 24 ROLL-LOCK SILL BAND
- 25 1 X 2 CEMENTITIOUS BATTEN AT 12" OC - REFER TO DETAIL 5/A-201



HUGHES GROUP ARCHITECTS

22630 DAVIS DRIVE, SUITE 175  
STERLING, VIRGINIA 20164  
703.437.6600

CIVIL:

ALPHA ENGINEERING

21351 Ridgeway Circle, Suite 200  
Sterling, VA 20166  
(703) 450-0800

STRUCTURAL:

EHLERT-BRYAN

1451 Daley Madison Blvd, Suite 220  
McLean, VA 22101  
(703) 827-9552

MECHANICAL/ELECTRICAL:

BRINJAC ENGINEERING

4000 Albemarle Street, NW, Suite 305  
Washington, DC 20016  
(202) 237-2750

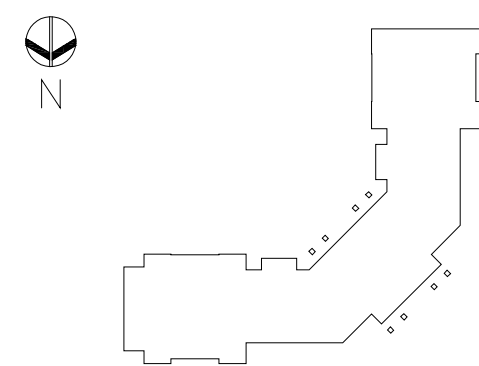


# PURCELLVILLE FIRE AND RESCUE

500 MAPLE AVE. BUILDING #  
PURCELLVILLE, VIRGINIA

## WALL TYPES

KEY PLAN



REVISIONS:

ISSUES:

9-26-07 BID SET

STAMP AND SEAL:

DATE:

9-26-07

SCALE:

AS NOTED

PROJECT NO.

0611

SHEET:

A-011